**FILE NOTATIONS**

Entered in NID File ..... ✓
Location Map Pinned ..... ✓
Card Indexed ..... ✓

Checked by Chief PMB
Approval Letter 6-2-72
Disapproval Letter .....

COMPLETION DATA:
Date Well Completed 7-10-72
Location Inspected .....

W..... WW..... TA.....
GW..... OS..... PA.....

Bond released
State or Fee Land .....

**LOGS FILED**

Driller's Log..... ✓
Electric Logs (No.) ..... ✓

E..... I..... Dual I Lat..... GR-N..... Micro.....
FHC Sonic GR..... Lat..... Mi-L..... Sonic.....
CBLog..... CCLog..... Others.....

Form 9-331 C
(May 1963)

SUBMIT IN [illegible]PLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1425.

# UNITED STATES
# DEPARTMENT OF THE INTERIOR
## GEOLOGICAL SURVEY

## APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK
DRILL [xx] DEEPEN [ ] PLUG BACK [ ]

b. TYPE OF WELL
OIL WELL [xx] GAS WELL [ ] OTHER SINGLE ZONE [ ] MULTIPLE ZONE [ ]

2. NAME OF OPERATOR
Webb Resources, Inc.

3. ADDRESS OF OPERATOR
1776 Lincoln Street, Denver, Colorado 80203

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface

At proposed prod. zone (to be submitted with Plat)

5. LEASE DESIGNATION AND SERIAL NO.
USA-U-9274

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
Federal

9. WELL NO.
#28-13

10. FIELD AND POOL, OR WILDCAT
Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec. 28-39S-8E

12. COUNTY OR PARISH
Kane

13. STATE
Utah

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)

16. NO. OF ACRES IN LEASE
2,560.00

17. NO. OF ACRES ASSIGNED TO THIS WELL
80

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.

19. PROPOSED DEPTH
3000'

20. ROTARY OR CABLE TOOLS
Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)

22. APPROX. DATE WORK WILL START*
Upon Approval

23. PROPOSED CASING AND CEMENTING PROGRAM

| SIZE OF HOLE | SIZE OF CASING | WEIGHT PER FOOT | SETTING DEPTH | QUANTITY OF CEMENT |
|---|---|---|---|---|
| 17" | 13-3/8" | 24# | 180' | Sufficient to fill to surface |
| | | | | |

PROPOSED WORK:

1. Drill 17" rotary hole for surface casing to approx. 180'
2. Cement approx. 180' of 13-3/8" surface casing with sufficient sxs cement to fill to surface.
3. Install and test blowout preventor equipment.
4. Blowout preventor to be given a daily operational test and each logged.
5. Drill 7-7/8" hole to approx. 3000' in the White Rim formation.
6. Run IES and Gamma Ray Sonic Caliper logs.
7. If commercial production is indicated, cement 5½" casing through productive sand and perforate 4 jet holes per foot.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.
SIGNED [signature] TITLE Exploration Manager DATE 5-31-72

(This space for Federal or State office use)

PERMIT NO. 43-025-30010 APPROVAL DATE

APPROVED BY TITLE DATE

CONDITIONS OF APPROVAL, IF ANY:

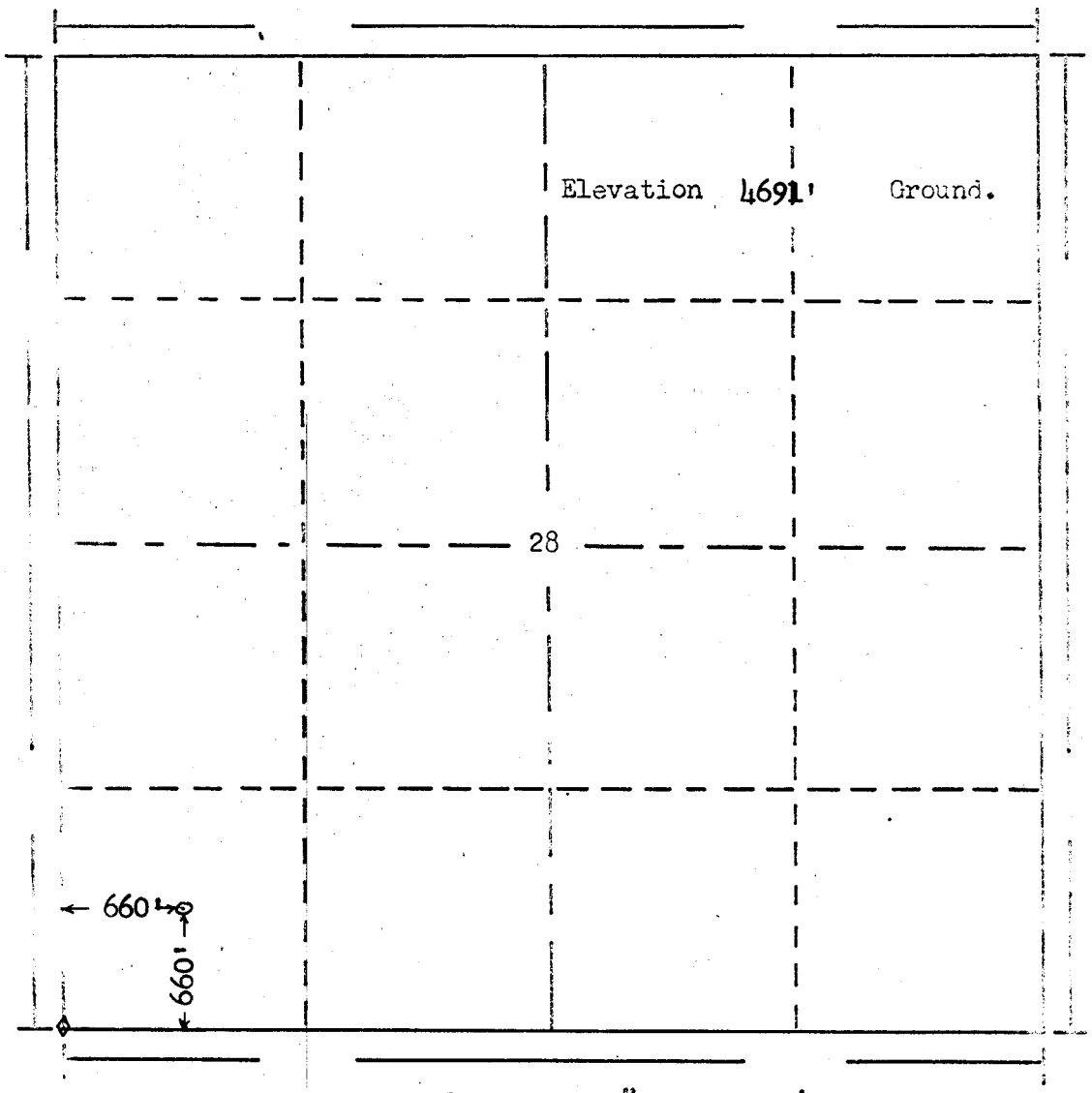
TIGHT HOLE

*See Instructions On Reverse Side

FORM F-106

Cmf

R. 8 E.




Scale... 1" = 1000'

Powers Elevation Company, Inc. of Denver, Colorado has in accordance with a request from Orlin Terry for Webb Resources determined the location of #28-13 Federal to be C SW SW Section 28 Township 39 S. Range 8 E. of the Salt Lake Meridian Kane County, Utah

I hereby certify that this plat is an accurate representation of a correct survey showing the location of #28-13 Federal

Date: 5-2-72

Licensed Land Surveyor No. [illegible]
State of Utah

MEMO

**webb resources, inc.**
1776 LINCOLN STREET
DENVER, COLORADO 80203

| | |
|---|---|
| **TO:** Utah Oil & Gas Commission<br>1588 West North Temple<br>Salt Lake City, Utah 84116 | **ATTN:** |
| **FROM:** Orlyn Terry, Exploration Manager | **DATE:** 5-31-72 |
| **SUBJECT:** APPLICATIONS FOR PERMIT TO DRILL | **REF:** |

Enclosed for your approval, please find the Applications for Permit to drill on the following wells:

| | | |
|---|---|---|
| #15-12 Woolsey | NE SW Sec. 15-36S-3E | Garfield Co., Utah |
| #28-13 Federal | SW SW Sec. 28-39S-8E | Kane County, Utah |

The Survey plats will be forwarded to your office as soon as possible.

Thank you.

OLT:sm
enc

SIGNED Orlyn Terry, fsm

June 5, 1972

Webb Resources Inc.
1776 Lincoln Street
Denver, Colorado

Re: Well No. Federal #28-13
Sec. 28, T. 39 S, R. 8 E,
Kane County, Utah

Gentlemen:

Insofar as this office is concerned, approval to drill the above referred to well is hereby granted. However, said approval is conditional upon a surveyor's plat of the proposed location being forwarded this office as soon as possible.

Should you determine that it will be necessary to plug and abandon this well, you are hereby requested to immediately notify the following:

PAUL W. BURCHELL - Chief Petroleum Engineer
HOME: 277-2890
OFFICE: 328-5771

Enclosed please find Form OGC-8-X, which is to be completed whether or not water sands (aquifers) are encountered during drilling. Your cooperation with regard to completing this form will be greatly appreciated.

The API number assigned to this well is 43-025-30010.

Very truly yours,

DIVISION OF OIL & GAS CONSERVATION

CLEON B. FEIGHT
DIRECTOR

CBF:sd
cc: U.S. Geological Survey

Branch of Oil and Gas Operations
8416 Federal Building
Salt Lake City, Utah 84111

June 16, 1972

Mr. Orlyn Terry
Webb Resources, Inc.
1766 Lincoln Street
Denver, Colorado 80203

Re: Well 28-13 Federal
SW¼SW¼ sec. 28-39S-8E, SLM
Kane County, Utah
Lease U 9274

Dear Mr. Terry:

Enclosed is your copy of the Application for Permit to Drill the referenced well which was approved by this office on June 15, 1972.

I wish to draw your attention to the stipulation attached to the lease insofar as it concerns the discovery of significant archeologic remains during construction operations. Any such discovery requires that construction be halted until the remains are examined by the Bureau of Land Management.

If you decide to complete the well for production, the 5½ inch casing must be cemented through the interval of about 1600' to 1400' to protect fresh water in the Navajo formation.

Sincerely,

(ORIG. SGD.) G. R. DANIELS

Gerald R. Daniels,
District Engineer

cc: BLM, Kanab
State Div. O&G Cons.
Casper

Put land well lost @ about 1800' & plugged

Mike Webster — Webb Resources

28-13 FEDERAL

TD 3091

215 13 3/8" cc w/260 — No Freshwater shallow

8 3/4 hole —

| Tops | | | |
|---|---|---|---|
| | | | 2800 up w/40 |
| Kayenta | 1430 | | 1000 up w/40 |
| Chinle | 1850 | | 215 up w/40 |
| Shinarump | 2440 | - Tstd 1800' water | 10 w mKr. |
| Kaibab | 2735 | | |
| Wh Rim | 2800 | - Tstd 1800' Water | |

Oral ~~approval~~ to abd 7-9-72

28-13 Fed - Webb Resources.
sec 28 39S 8E

3091 T.D. Watkins - water only
↓
1800' of Water (fresh)
also Shinarump.

U.S.G.S. called 7/10/72 and stated above water has been Plugged off and Rule P & A. — JMB

Form 9-331
(May 1963)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE* (Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1424.

# SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL ☐ GAS WELL ☐ OTHER DRY

2. NAME OF OPERATOR: Webb Resources, Inc.

3. ADDRESS OF OPERATOR: 1776 Lincoln Street, Denver, Colorado 80203

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface: 660' FSL & 660' FWL (C SW SW Sec. 28)

5. LEASE DESIGNATION AND SERIAL NO.: USA-U-9274

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME:

8. FARM OR LEASE NAME: Federal

9. WELL NO.: #28-13

10. FIELD AND POOL, OR WILDCAT: Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec. 28-39S-8E

14. PERMIT NO.:

15. ELEVATIONS (Show whether DF, RT, GR, etc.): 4691' G.L.

12. COUNTY OR PARISH: Kane

13. STATE: Utah

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

| NOTICE OF INTENTION TO: | | | | SUBSEQUENT REPORT OF: | | | |
|---|---|---|---|---|---|---|---|
| TEST WATER SHUT-OFF | ☐ | PULL OR ALTER CASING | ☐ | WATER SHUT-OFF | ☐ | REPAIRING WELL | ☐ |
| FRACTURE TREAT | ☐ | MULTIPLE COMPLETE | ☐ | FRACTURE TREATMENT | ☐ | ALTERING CASING | ☐ |
| SHOOT OR ACIDIZE | ☐ | ABANDON* | ☐ | SHOOTING OR ACIDIZING | ☐ | ABANDONMENT* | XX |
| REPAIR WELL | ☐ | CHANGE PLANS | ☐ | | | | |
| (Other) | | | | (Other) | | | |

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.) *

The subject well was spudded 6-28-72 and drilled to a total depth of 3092'. This well was proven non-productive and therefore, plugged and abandoned 7-10-72, per Mr. Gerald Daniels, USGS, as follows:

PLUGS: 2825-2725 40 sxs
1000- 900 40 sxs
250- 175 40 sxs
surface marker 10 sxs

18. I hereby certify that the foregoing is true and correct

SIGNED [signature] TITLE Exploration Manager DATE 8-28-72

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

Form 9-330
(Rev. 5-63)

# UNITED STATES
# DEPARTMENT OF THE INTERIOR
## GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE* (See other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R355.5.

# WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

1a. TYPE OF WELL: OIL WELL ☐ GAS WELL ☐ DRY ☒ Other

b. TYPE OF COMPLETION: NEW WELL ☐ WORK OVER ☐ DEEP-EN ☐ PLUG BACK ☐ DIFF. RESVR. ☐ Other P&A

2. NAME OF OPERATOR: Webb Resources, Inc.

3. ADDRESS OF OPERATOR: 1776 Lincoln Street, Denver, Colorado 80203

4. LOCATION OF WELL (*Report location clearly and in accordance with any State requirements*)*
At surface: 660' FSL, 660' FWL (CSW SW SEC. 28)
At top prod. interval reported below
At total depth: Same

5. LEASE DESIGNATION AND SERIAL NO.: USA-U-9274
6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
7. UNIT AGREEMENT NAME:
8. FARM OR LEASE NAME: Federal
9. WELL NO.: #28-13
10. FIELD AND POOL, OR WILDCAT: Wildcat
11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA: Sec. 28-39S-8E
12. COUNTY OR PARISH: Kane
13. STATE: Utah

14. PERMIT NO.:
DATE ISSUED: 6-15-72

15. DATE SPUDDED: 6-28-72
16. DATE T.D. REACHED: 7-9-72
17. DATE COMPL. (*Ready to prod.*): 7-10-72 P&A
18. ELEVATIONS (DF, RKB, RT, GR, ETC.)*: 4691' G.L.
19. ELEV. CASINGHEAD: ======

20. TOTAL DEPTH, MD & TVD: 3092'
21. PLUG, BACK T.D., MD & TVD: -------
22. IF MULTIPLE COMPL., HOW MANY*: ---------
23. INTERVALS DRILLED BY: → ROTARY TOOLS: 0-3092' CABLE TOOLS: -----

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*

25. WAS DIRECTIONAL SURVEY MADE: no

26. TYPE ELECTRIC AND OTHER LOGS RUN: IES & BHC-GR

27. WAS WELL CORED: no

28. CASING RECORD (*Report all strings set in well*)

| CASING SIZE | WEIGHT, LB./FT. | DEPTH SET (MD) | HOLE SIZE | CEMENTING RECORD | AMOUNT PULLED |
|---|---|---|---|---|---|
| 13-5/8" | 24# | 215' | 17-1/8 | 160 sxs | none |

29. LINER RECORD

| SIZE | TOP (MD) | BOTTOM (MD) | SACKS CEMENT* | SCREEN (MD) |
|---|---|---|---|---|
| | | | | |

30. TUBING RECORD

| SIZE | DEPTH SET (MD) | PACKER SET (MD) |
|---|---|---|
| | | |

31. PERFORATION RECORD (*Interval, size and number*)

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

| DEPTH INTERVAL (MD) | AMOUNT AND KIND OF MATERIAL USED |
|---|---|
| 2825 - 2725 | 40 sxs |
| 1000- 900 | 40 sxs |
| 250 - 175 | 40 sxs |
| surface | 10 sxs |

33.* PRODUCTION

| DATE FIRST PRODUCTION | PRODUCTION METHOD (*Flowing, gas lift, pumping—size and type of pump*) | WELL STATUS (*Producing or shut-in*) |
|---|---|---|
| | | |

| DATE OF TEST | HOURS TESTED | CHOKE SIZE | PROD'N. FOR TEST PERIOD → | OIL—BBL. | GAS—MCF. | WATER—BBL. | GAS-OIL RATIO |
|---|---|---|---|---|---|---|---|
| | | | | | | | |

| FLOW. TUBING PRESS. | CASING PRESSURE | CALCULATED 24-HOUR RATE → | OIL—BBL. | GAS—MCF. | WATER—BBL. | OIL GRAVITY-API (CORR.) |
|---|---|---|---|---|---|---|
| | | | | | | |

34. DISPOSITION OF GAS (*Sold, used for fuel, vented, etc.*)
TEST WITNESSED BY

35. LIST OF ATTACHMENTS
BLOWOUT PREVENTOR REPORT (SEE REVERSE SIDE)

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED [signature] TITLE Exploration Manager DATE 8-28-72

*(See Instructions and Spaces for Additional Data on Reverse Side)

# INSTRUCTIONS

**General:** This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office. See instructions on items 22 and 24, and 33, below regarding separate reports for separate completions.

If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see item 35.

**Item 4:** If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

**Item 18:** Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments.

**Items 22 and 24:** If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.

**Item 29:** *"Sacks Cement":* Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.

**Item 33:** Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

37. SUMMARY OF POROUS ZONES:
SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF; CORED INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES

| FORMATION | TOP | BOTTOM | DESCRIPTION, CONTENTS, ETC. |
|---|---|---|---|
| DST #1<br>SHINARUMP | 2447 | 2501 | op 10'/si 30'/.op 60'/si 30'/<br>rec: 60' sli MCW, 1875' water<br>HP: 1263-1257#, SIP: 954-968#<br>1st FP: 121-391#, 2nd FP: 418-820# |
| DST #2<br>KAIBAB | 2741 | 2756 | op 10'/si 30'/op 60'/si 30'/<br>rec: 1740' sulfur water<br>HP: 1448-1434#, SIP: 978-950#<br>1st FP: 193-386#, 2nd FP: 344-937# |
| | | | BLOWOUT PREVENTOR REPORT<br>Installed BOP after cementing 165'; 13-5/8" surface casing. Tested to 1000# on 6-28-72 for 30 minutes. From 6-28-72 rams were tested daily and on each trip for new bit. |

38. GEOLOGIC MARKERS

| NAME | TOP MEAS. DEPTH | TOP TRUE VERT. DEPTH |
|---|---|---|
| Chinle | 1730' | |
| Shinarump | 2445' | |
| Moenkopi | 2531' | |
| Kaibab | 2738' | |
| White Rim | 2815' | |
| Total Depth | 3091' | Loggers |

U.S. GOVERNMENT PRINTING OFFICE: 1963—O-683636
GPO 837-497

## FLUID SAMPLE DATA

Sampler Pressure _____ P.S.I.G. at Surface
Recovery: Cu. Ft. Gas _____
cc. Oil _____
cc. Water _____
cc. Mud _____
Tot. Liquid cc. _____
Gravity _____ ° API @ _____ °F.
Gas/Oil Ratio _____ cu. ft./bbl.

| | RESISTIVITY | CHLORIDE CONTENT |
|---|---|---|
| Recovery Water | ____ @ ____ °F. | ____ ppm |
| Recovery Mud | ____ @ ____ °F. | |
| Recovery Mud Filtrate | ____ @ ____ °F. | ____ ppm |
| Mud Pit Sample | ____ @ ____ °F. | |
| Mud Pit Sample Filtrate | ____ @ ____ °F. | ____ ppm |
| Mud Weight | 9.3 vis 20 cp | |

Date 7-5-72 Ticket Number 529467
Kind of Job OPEN HOLE Halliburton District VERNAL
Tester MR. DAVIS Witness MR. WEBSTER / MR. CRISMAN
Drilling Contractor BARKER DRILLING COMPANY DR S

## EQUIPMENT & HOLE DATA

Formation Tested Shinarump
Elevation 4700' KB Ft.
Net Productive Interval 54' Ft.
All Depths Measured From Kelly Bushing
Total Depth 2501' Ft.
Main Hole/Casing Size 8 3/4"
Drill Collar Length 510' I.D. 2.25"
Drill Pipe Length 1899' I.D. 3.640"
Packer Depth(s) 2442'-2447' Ft.
Depth Tester Valve 2427' Ft.

Cushion TYPE AMOUNT Ft. Depth Back Pres. Valve
Surface Choke 1/8" Bottom Choke 3/4"

Recovered 1935 Feet of water
Recovered Feet of
Recovered Feet of
Recovered Feet of
Recovered Feet of

Meas. From Tester Valve

Remarks Opened tool for 10 minute first flow with a good blow, very strong blow in 1 minute. Closed tool for 29 minute first closed in pressure. Reopened tool for 60 minute second flow with a strong blow, declining slightly after 30 minutes. Closed tool for 31 minute second closed in pressure.

| TEMPERATURE | Gauge No. 490 | | Gauge No. 198 | | Gauge No. | | TIME | |
|---|---|---|---|---|---|---|---|---|
| | Depth: 2428 Ft. | | Depth: 2497 Ft. | | Depth: Ft. | | | |
| Est. 88 °F. | 12 Hour Clock | | 12 Hour Clock | | Hour Clock | | Tool Opened 9:40 A.M. P.M. | |
| | Blanked Off No | | Blanked Off Yes | | Blanked Off | | Tool Closed 11:50 A.M. P.M. | |
| Actual °F. | Pressures | | Pressures | | Pressures | | | |
| | Field | Office | Field | Office | Field | Office | Reported Minutes | Computed Minutes |
| Initial Hydrostatic | 1227 | 1214 | 1268 | 1254 | | | | |
| First Period Flow Initial | 179 | 51 | 121 | 117 | | | ____ | ____ |
| First Period Flow Final | 258 | 346 | 391 | 399 | | | 10 | 10 |
| First Period Closed in | 909 | 907 | 954 | 970 | | | 30 | 29 |
| Second Period Flow Initial | 372 | 368 | 418 | 419 | | | ____ | ____ |
| Second Period Flow Final | 799 | 790 | 820 | 850 | | | 60 | 60 |
| Second Period Closed in | 923 | 899 | 968 | 962 | | | 30 | 31 |
| Third Period Flow Initial | | | | | | | ____ | ____ |
| Third Period Flow Final | | | | | | | | |
| Third Period Closed In | | | | | | | | |
| Final Hydrostatic | 1213 | 1210 | 1250 | 1249 | | | ____ | ____ |

Legal Location Sec. - Twp. - Rng. 28-39S-8E
Lease Name FEDERAL
Well No. 28-13
Test No. 1
Tested Interval 2447'-2501'
Field Area WILDCAT
County KANE
State UTAH
Lease Owner/Company Name WEBB RESOURCES

PRINTED IN U.S.A.

# FORMATION TEST DATA

LITTLE'S

| Gauge No. | 490 | Depth | 2428' | Clock No. | 7129 | 12 hour | Ticket No. | 529467 |
|---|---|---|---|---|---|---|---|---|

| | First Flow Period | | First Closed In Pressure | | | Second Flow Period | | Second Closed In Pressure | | | Third Flow Period | | Third Closed In Pressure | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Time Defl. .000" | PSIG Temp. Corr. | Time Defl. .000" | Log $\frac{t+\theta}{\theta}$ | PSIG Temp. Corr. | Time Defl. .000" | PSIG Temp. Corr. | Time Defl. .000" | Log $\frac{t+\theta}{\theta}$ | PSIG Temp. Corr. | Time Defl. .000" | PSIG Temp. Corr. | Time Defl. .000" | Log $\frac{t+\theta}{\theta}$ | PSIG Temp. Corr. |
| 0 | .000 | 51 | .000 | | 346 | .000 | 368 | .000 | | 790 | | | | | |
| 1 | .014 | 158 | .0069 | | 836* | .0688 | 492 | .0206 | | 877** | | | | | |
| 2 | .028 | 247 | .0207 | | 867 | .1376 | 591 | .0343 | | 883 | | | | | |
| 3 | .042 | 280 | .0345 | | 879 | .2064 | 666 | .0480 | | 887 | | | | | |
| 4 | .056 | 314 | .0483 | | 887 | .2752 | 718 | .0617 | | 889 | | | | | |
| 5 | .070 | 346 | .0621 | | 891 | .3440 | 760 | .0754 | | 891 | | | | | |
| 6 | | | .0759 | | 895 | .4130 | 790 | .0891 | | 892 | | | | | |
| 7 | | | .0897 | | 896 | | | .1028 | | 893 | | | | | |
| 8 | | | .1035 | | 897 | | | .1165 | | 894 | | | | | |
| 9 | | | .1173 | | 899 | | | .1302 | | 895 | | | | | |
| 10 | | | .1311 | | 900 | | | .1439 | | 896 | | | | | |
| 11 | | | .1449 | | 901 | | | .1576 | | 897 | | | | | |
| 12 | | | .1587 | | 903 | | | .1713 | | 898 | | | | | |
| 13 | | | .1725 | | 904 | | | .1850 | | 899 | | | | | |
| 14 | | | .1863 | | 905 | | | .1987 | | 899 | | | | | |
| 15 | | | .2000 | | 907 | | | .2130 | | 899 | | | | | |

| Gauge No. | 198 | | Depth | 2497' | | Clock No. | 3806 | 12 hour | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | .000 | 117 | .000 | | 399 | .000 | 419 | .000 | | 850 | | | | | |
| 1 | .0142 | 216 | .0066 | | 893* | .0667 | 548 | .0201 | | 938** | | | | | |
| 2 | .0284 | 243 | .0198 | | 930 | .1334 | 650 | .0335 | | 944 | | | | | |
| 3 | .0426 | 332 | .0330 | | 944 | .2001 | 723 | .0469 | | 948 | | | | | |
| 4 | .0568 | 364 | .0462 | | 952 | .2668 | 776 | .0603 | | 950 | | | | | |
| 5 | .0710 | 399 | .0594 | | 954 | .3335 | 819 | .0737 | | 952 | | | | | |
| 6 | | | .0726 | | 957 | .4000 | 850 | .0871 | | 956 | | | | | |
| 7 | | | .0858 | | 961 | | | .1005 | | 957 | | | | | |
| 8 | | | .0990 | | 964 | | | .1139 | | 958 | | | | | |
| 9 | | | .1122 | | 966 | | | .1273 | | 960 | | | | | |
| 10 | | | .1254 | | 966 | | | .1407 | | 961 | | | | | |
| 11 | | | .1386 | | 968 | | | .1541 | | 962 | | | | | |
| 12 | | | .1518 | | 969 | | | .1675 | | 962 | | | | | |
| 13 | | | .1650 | | 970 | | | .1809 | | 962 | | | | | |
| 14 | | | .1782 | | 970 | | | .1943 | | 962 | | | | | |
| 15 | | | .1910 | | 970 | | | .2080 | | 962 | | | | | |
| Reading Interval | 2 | | 2 | | | 10 | | 2 | | | | | | | Minutes |

REMARKS: * First interval equal to 1 minute **-3 minutes.

529467

| | O. D. | I. D. | LENGTH | DEPTH |
|---|---|---|---|---|
| Reversing Sub | 6.0" | 2.75" | 1' | |
| Water Cushion Valve | | | | |
| Drill Pipe | 4½" | 3.640" | 1899' | |
| Drill Collars | 6.0" | 2.25" | 510' | |
| Handling Sub & Choke Assembly | | | | |
| Dual CIP Valve | 5.0" | .89" | 5' | |
| Dual CIP Sampler | | | | |
| Hydro-Spring Tester | 5.0" | .75" | 5' | 2427' |
| Multiple CIP Sampler | | | | |
| Extension Joint | | | | |
| AP Running Case | 5.0" | 3.90" | 4' | 2428' |
| Hydraulic Jar | 5.0" | 1.50" | 5' | |
| VR Safety Joint | 5.0" | 1.0" | 3' | |
| Pressure Equalizing Crossover | | | | |
| Packer Assembly | 7/75" | 1.53" | 6' | 2442' |
| Distributor | | | | |
| Packer Assembly | 7/75" | 1.53" | 6' | 2447' |
| Flush Joint Anchor | 5.75" | 3.75" | 10' | |
| Pressure Equalizing Tube | | | | |
| Blanked-Off B.T. Running Case | | | | |
| Drill Collars | 6.0" | 2.25" | 30' | |
| Anchor Pipe Safety Joint | | | | |
| Packer Assembly | | | | |
| Packer Assembly | | | | |
| Anchor Pipe Safety Joint | | | | |
| Side Wall Anchor | | | | |
| Drill Collars | | | | |
| Flush Joint Anchor | 5.75" | 3.75" | 5' | |
| Blanked-Off B.T. Running Case | 5.75" | 3.75" | 5' | 2497' |

## FLUID SAMPLE DATA

Sampler Pressure _____ P.S.I.G. at Surface
Recovery: Cu. Ft. Gas _____
cc. Oil _____
cc. Water _____
cc. Mud _____
Tot. Liquid cc. _____
Gravity _____ ° API @ _____ °F.
Gas/Oil Ratio _____ cu. ft./bbl.

| | RESISTIVITY | | CHLORIDE CONTENT |
|---|---|---|---|
| Recovery Water | ____ @ ____ °F. | | ____ ppm |
| Recovery Mud | ____ @ ____ °F. | | |
| Recovery Mud Filtrate | ____ @ ____ °F. | | ____ ppm |
| Mud Pit Sample | ____ @ ____ °F. | | |
| Mud Pit Sample Filtrate | ____ @ ____ °F. | | ____ ppm |
| Mud Weight | 9.7 vis | 25 cp | |

Date 7-7-72 Ticket Number 529468
Kind of Job OPEN HOLE Halliburton District VERNAL
Tester DAVIS Witness WEBSTER CRISMAN
Drilling Contractor BAKER DRILLING COMPANY NM S

## EQUIPMENT & HOLE DATA

Formation Tested ~~Timpoweap~~ ? KAIBAB ?
Elevation 4700' K.B. Ft.
Net Productive Interval 16' Ft.
All Depths Measured From Kelly Bushing
Total Depth 2757' Ft.
Main Hole/Casing Size 8 3/4"
Drill Collar Length 540' I.D. 2.25"
Drill Pipe Length 2160' I.D. 3.640"
Packer Depth(s) 2735' - 2741' Ft.
Depth Tester Valve 2721' Ft.

Cushion TYPE NONE AMOUNT ____ Ft. Depth Back Pres. Valve NONE Surface Choke 1/8" Bottom Choke 3/4"

Recovered 1740' Feet of water
Recovered ____ Feet of
Recovered ____ Feet of
Recovered ____ Feet of
Recovered ____ Feet of

Meas. From Tester Valve

Remarks Tool opened with a good blow - very strong in 1½ minutes of a 10 minute first flow. Closed tool for a 30 minute first closed in pressure. Tool reopened with a strong blow - declining 12 PSI in 25 minutes. Took a 31 minute second closed in pressure.

| TEMPERATURE | Gauge No. 490 Depth: 2722' Ft. | Gauge No. 198 Depth: 2754' Ft. | Gauge No. Depth: Ft. | TIME |
|---|---|---|---|---|
| | 12 Hour Clock | 12 Hour Clock | Hour Clock | Test ***** |
| Est. 98 °F. | Blanked Off NO | Blanked Off YES | Blanked Off | Opened 5:00 P.M. |
| Actual °F. | Pressures | Pressures | Pressures | Tool ***** Closed 7:10 P.M. |

| | | Field | Office | Field | Office | Field | Office | Reported Minutes | Computed Minutes |
|---|---|---|---|---|---|---|---|---|---|
| Initial Hydrostatic | | 1344 | 1414 | 1448 | 1433 | | | | |
| First Period | Flow Initial | 216 | 88 | 193 | 112 | | | ____ | ____ |
| | Flow Final | 337 | 361 | 344 | 377 | | | 10 | 10 |
| | Closed in | 941 | 972 | 978 | 988 | | | 30 | 30 |
| Second Period | Flow Initial | 364 | 380 | 386 | 396 | | | ____ | ____ |
| | Flow Final | 767 | 785 | 937 | 803 | | | 60 | 59 |
| | Closed in | 887 | 959 | 950 | 971 | | | 30 | 31 |
| Third Period | Flow Initial | | | | | | | ____ | ____ |
| | Flow Final | | | | | | | | |
| | Closed in | | | | | | | | |
| Final Hydrostatic | | 1344 | 1399 | 1434 | 1417 | | | ____ | ____ |

Lease Name FEDERAL
Legal Location Sec. - Twp. - Rng. 28 - 39S - 8E
Well No. 28-13
Test No. 2
Field Area WILDCAT
Tested Interval 2741' - 2757'
County KANE
State UTAH
Lease Owner/Company Name WEBB RESOURCES

PRINTED IN U.S.A.

# FORMATION TEST DATA

LITTLE'S

5

| Gauge No. | 490 | Depth | 2722' | Clock No. | 7129 | 12 hour | Ticket No. | 529468 |
|---|---|---|---|---|---|---|---|---|

| | First Flow Period | | First Closed In Pressure | | | Second Flow Period | | Second Closed In Pressure | | | Third Flow Period | | Third Closed In Pressure | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Time Defl. .000" | PSIG Temp. Corr. | Time Defl. .000" | Log $\frac{t+\theta}{\theta}$ | PSIG Temp. Corr. | Time Defl. .000" | PSIG Temp. Corr. | Time Defl. .000" | Log $\frac{t+\theta}{\theta}$ | PSIG Temp. Corr. | Time Defl. .000" | PSIG Temp. Corr. | Time Defl. .000" | Log $\frac{t+\theta}{\theta}$ | PSIG Temp. Corr. |
| 0 | .000 | 88 | .000 | | 361 | .000 | 380 | .000 | | 785 | | | | | |
| 1 | .0136 | 174 | .0205 | | 904 | .0621 | 490* | .0274 | | 916** | | | | | |
| 2 | .0272 | 262 | .0410 | | 927 | .1311 | 590 | .0479 | | 930 | | | | | |
| 3 | .0408 | 295 | .0615 | | 941 | .2001 | 663 | .0684 | | 937 | | | | | |
| 4 | .0544 | 326 | .0820 | | 950 | .2691 | 715 | .0889 | | 942 | | | | | |
| 5 | .068 | 361 | .1025 | | 957 | .3381 | 755 | .1094 | | 946 | | | | | |
| 6 | | | .1230 | | 961 | .407 | 785 | .1299 | | 949 | | | | | |
| 7 | | | .1435 | | 964 | | | .1504 | | 952 | | | | | |
| 8 | | | .1640 | | 968 | | | .1709 | | 953 | | | | | |
| 9 | | | .1845 | | 970 | | | .1914 | | 955 | | | | | |
| 10 | | | .205 | | 972 | | | .212 | | 959 | | | | | |
| 11 | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | |

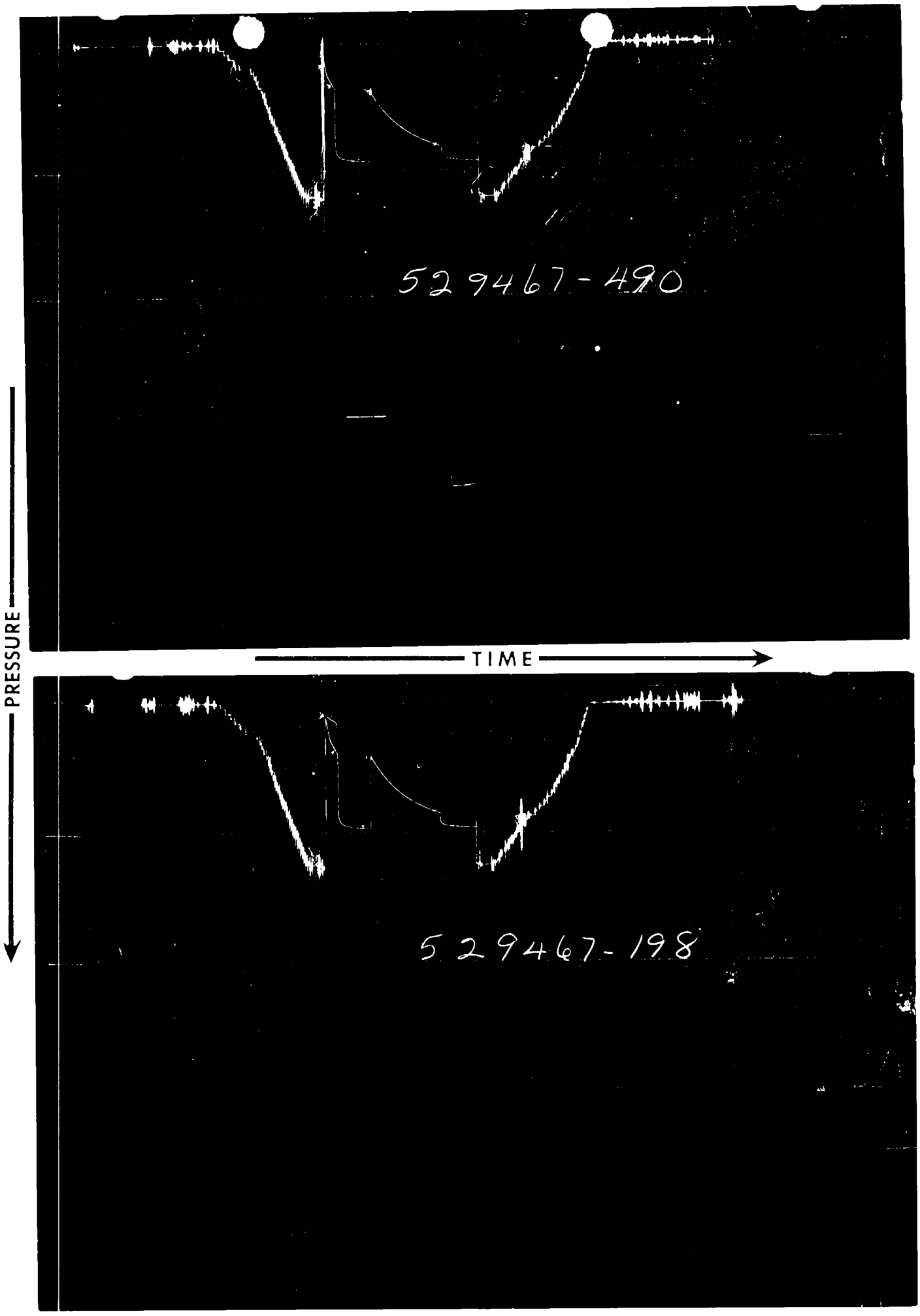
| Gauge No. | 198 | Depth | 2754' | Clock No. | 3806 | hour | 12 |
|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | .000 | 112 | .000 | | 377 | .000 | 396 | .000 | | 803 | | | | | |
| 1 | .014 | 186 | .020 | | 921 | .0598 | 511* | .0266 | | 933** | | | | | |
| 2 | .028 | 275 | .040 | | 944 | .1262 | 607 | .0465 | | 944 | | | | | |
| 3 | .042 | 311 | .060 | | 957 | .1926 | 678 | .0664 | | 952 | | | | | |
| 4 | .056 | 345 | .080 | | 965 | .2590 | 731 | .0863 | | 957 | | | | | |
| 5 | .070 | 377 | .100 | | 971 | .3254 | 771 | .1062 | | 961 | | | | | |
| 6 | | | .120 | | 976 | .392 | 803 | .1261 | | 964 | | | | | |
| 7 | | | .140 | | 979 | | | .1460 | | 965 | | | | | |
| 8 | | | .160 | | 983 | | | .1659 | | 968 | | | | | |
| 9 | | | .180 | | 985 | | | .1858 | | 969 | | | | | |
| 10 | | | .200 | | 988 | | | .206 | | 971 | | | | | |
| 11 | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | |
| Reading Interval | 2 | | 3 | | | 10 | | 3 | | | | | | | Minutes |

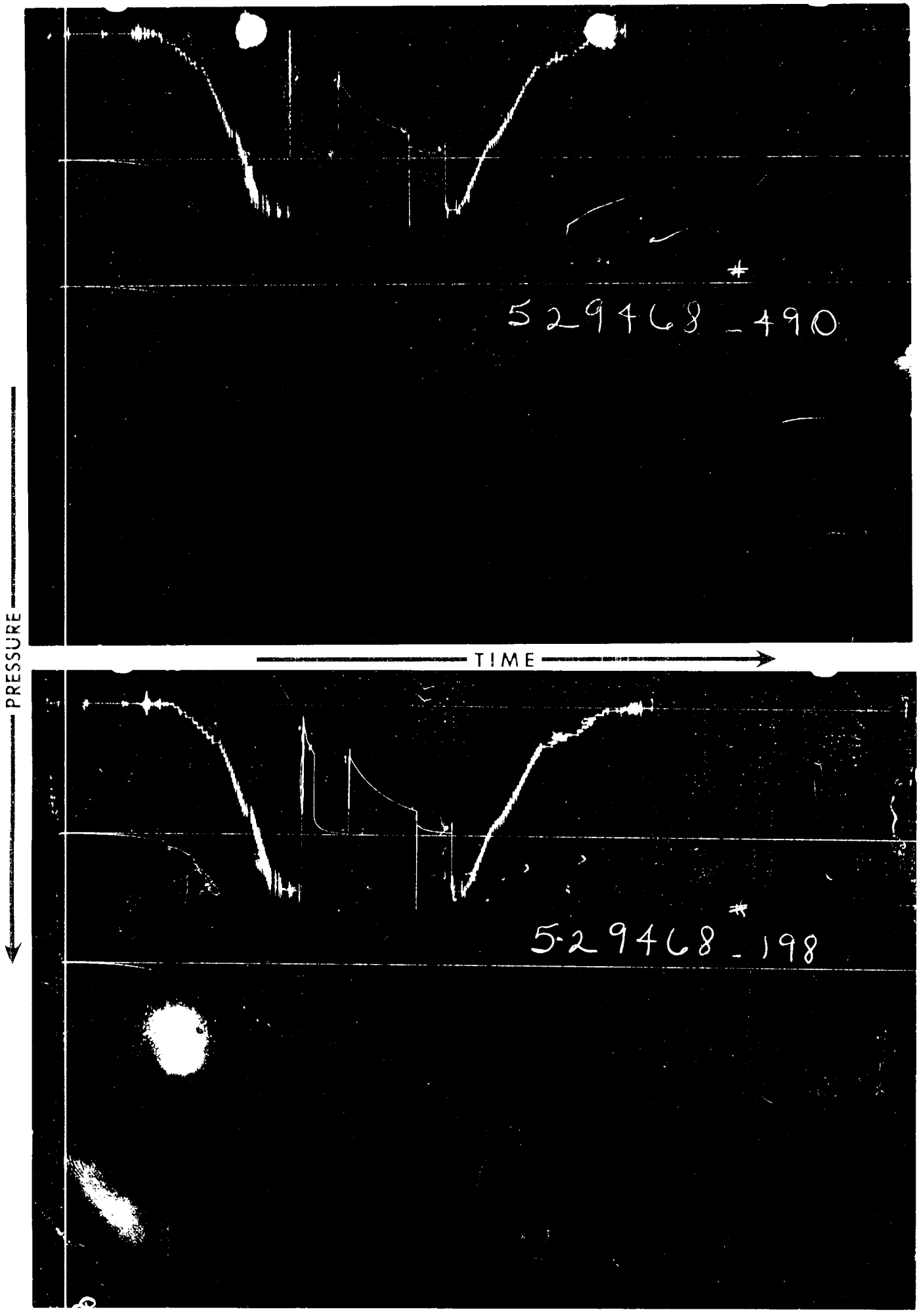
REMARKS: * INTERVAL = 9 MINUTES. ** INTERVAL = 4 MINUTES.

529468

| | O. D. | I. D. | LENGTH | DEPTH |
|---|---|---|---|---|
| Reversing Sub | 6.00" | 2.75" | 1' | |
| Water Cushion Valve | | | | |
| Drill Pipe | 4½" | 3.640" | 2160' | |
| Drill Collars | 6.0" | 2.25" | 540' | |
| Handling Sub & Choke Assembly | | | | |
| Dual CIP Valve | 5" | .89" | 5' | |
| Dual CIP Sampler | | | | |
| Hydro-Spring Tester | 5" | .75" | 5' | 2721' |
| Multiple CIP Sampler | | | | |
| Extension Joint | | | | |
| AP Running Case | 5.0" | 3.90" | 4' | 2722' |
| Hydraulic Jar | 5.0" | 1.50" | 5' | |
| VR Safety Joint | 5.0" | 1.00" | 3' | |
| Pressure Equalizing Crossover | | | | |
| Packer Assembly | 7.75" | 1.53" | 6' | 2735' |
| Distributor | | | | |
| Packer Assembly | 7.75" | 1.53" | 6' | 2741' |
| Flush Joint Anchor | 5.75" | 3.75" | 8' | |
| Pressure Equalizing Tube | | | | |
| Blanked-Off B.T. Running Case | | | | |
| Drill Collars | | | | |
| Anchor Pipe Safety Joint | | | | |
| Packer Assembly | | | | |
| Packer Assembly | | | | |
| Anchor Pipe Safety Joint | | | | |
| Side Wall Anchor | | | | |
| Drill Collars | | | | |
| Flush Joint Anchor | | | | |
| Blanked-Off B.T. Running Case | 5.75" | 3.75" | 5.50' | 2754' |




Each Horizontal Line Equal to 1000 p.s.i.




Each Horizontal Line Equal to 1000 p.s.i.

Michael S. Webster
*Consulting Geologist*
555 Petroleum Club Building
Denver, Colorado 80202

893-6453

# GEOLOGICAL WELL REPORT

WEBB RESOURCES, INC.

#28-13 Federal

Kane County, Utah

## WELL DATA

| | |
|---|---|
| Operator: | Webb Resources, Inc.<br>Suite 1300, Denver Center Building<br>1776 Lincoln Street<br>Denver, Colorado 80203 |
| Well: | #28-13 Federal |
| Location: | SW SW Section 28<br>T39S R8E<br>Kane County, Utah<br>Wildcat |
| Elevations: | 4700' KB<br>4691' Ground |
| Contractor: | Barker Drilling and Well Service Company<br>Vernal, Utah |
| Commenced: | June 28, 1972 |
| Surface Casing: | 13 5/8" set at 215' KB with 160 sacks |
| Hole Size: | 8 3/4" |
| Drilling Fluid: | Low Solids Gel with Crude<br>Engineer: Dan Reid, Milchem<br>Escalante, Utah |
| Cores: | None |
| Drillstem Tests: | Halliburton, Vernal, Utah<br>Wayne Davis, Tester |
| Samples: | Delivered to American Stratigraphic,<br>Denver, Colorado, on July 11, 1972 |
| Logging: | Schlumberger Induction and Compensated<br>Sonic with Gamma Ray<br>Engineer: Mike Martin<br>Farmington, New Mexico |
| Total Depth: | Reached 3:30 A. M., July 9, 1972<br>3091' Driller<br>3092' Log |
| Status: | Plugged and Abandoned, July 10, 1972 |

## WELL HISTORY

| Date | Depth | Activity | Footage Made | Remarks |
|---|---|---|---|---|
| 6-28 | | Rigging up | | Spud at 9:00 P.M. |
| 6-29 | | Reaming | | Reamed 13 1/4" Surface Hole to 17 1/8", Ran 13 3/8" casing to 215', KB, cemented with 215 sacks. |
| 6-30 | 215' | Nippling up | 215' | |
| 7-1 | 1100' | Drilling | 885' | |
| 7-2 | 1650' | Drilling | 550' | |
| 7-3 | 1937' | Trip for bit #3 | 287' | 8 hours working tight hole. |
| 7-4 | 2220' | Drilling | 283' | |
| 7-5 | 2501' | Circulating for DST #1 | 281' | |
| 7-6 | 2525' | Drilling | 24' | |
| 7-7 | 2757' | Circulating for DST #2 | 232' | |
| 7-8 | 2857' | Drilling | 100' | |
| 7-9 | 3091' | Circulating for logs | 234' | Reached TD at 3:30 A.M. Began logging at 2:15 P.M. Finished logging at 6:00 P.M. |
| 7-10 | 3091' | Plugging | | |

## BIT RECORD

| Run | Size | Make | Type | Depth Out | Footage | Hours |
|---|---|---|---|---|---|---|
| X | 13 1/4" | Reed | YT1AJ | 255' | 255' | 8 1/2 |
| X | 17 1/8" | Reed | H.O. | 226' | 226' | 3 1/4 |
| 1 | 8 3/4" | Reed | YS1G | 576' | 321' | 7 |
| 2 | 8 3/4" | Reed | SCH5-J | 1937' | 1361' | 58 |
| 3 | 8 3/4" | Security | DMJ | 2261' | 324' | 17 3/4 |
| 4 | 8 3/4" | Security | M4NG | 2501' | 240' | 9 1/2 |
| 5 | 8 3/4" | Security | N4NG | 2757' | 256' | 13 |
| 6 | 8 3/4" | Hughes | J44 | 3091' | 333' | 26 1/2 |
| | | | | | | 143 1/2 |

## DEVIATION RECORD

| Depth | Deviation | Depth | Deviation |
|---|---|---|---|
| 226' | 3/4° | 2261' | 3 3/4° |
| 255' | 0 | 2501' | 4 1/2° |
| 576' | 1 3/4° | 2757' | 2 3/4° |
| 1937' | 2 1/2° | | |

## PLUGGING PROGRAM

Verbal plugging orders were received from Mr. Gerald Daniels, United States Geological Survey, Salt Lake City, on July 9, 1972, at 10:00 A. M.

| Interval | Sacks |
|---|---|
| 2825'-2725' | 40 |
| 1000'-900' | 40 |
| 250'-175' | 40 |
| Surface | 10, with dry hole marker |

## FORMATION TOPS

| Formation | Log Depth | Datum |
|---|---|---|
| Chinle | 1730' | +2970' |
| Shinarump | 2445' | +2255' |
| Moenkopi | 2531' | +2169' |
| Kaibab | 2738' | +1962' |
| White Rim | 2815' | +1885' |

## DRILLSTEM TESTS

DST#1 2447'-2501' Conventional test (Shinarump Formation) Open 10", Shut in 30", Open 60", Shut in 30". Tool opened with strong blow, bottom of bucket in 1 minute.

Recovered: 60' slightly mud cut water
1875' water, Rw = 1.04 @ 72°

| | |
|---|---|
| H.P. | 1263#-1257# |
| 1st F.P. | 121#-391# |
| 2nd F.P. | 418#-820# |
| S.I.P. | 954#-968# |
| B.H.T. | 88° |

DST#2 2741'-2756' Conventional test (Kaibab Formation) Open 10", Shut in 30", Open 60", Shut in 30". Tool opened with strong blow, bottom of bucket in 1 1/2 minutes.

Recovered: 1740' Sulfur water, Rw = 2.23 at 72°

| | |
|---|---|
| H.P. | 1448#-1434# |
| 1st F.P. | 193#-386# |
| 2nd F.P. | 344#-937# |
| S.I.P. | 978#-950# |
| B.H.T. | 98° |

## FIELD LOG CALCULATIONS

| Formation | Depth | Rw | Porosity | Sw |
|---|---|---|---|---|
| Shinarump | 2450' | 0.75 | 15% | 90% |
| " | 2470' | 0.75 | 17% | 72% |
| " | 2500' | 0.75 | 18% | 69% |
| Kaibab | 2743' | 1.60 | 17% | 35% |
| " | 2748' | 1.60 | 17% | 93% |
| " | 2760' | 1.60 | 13% | 100% |
| " | 2800' | 1.60 | 15% | 92% |
| White Rim | 2825' | 1.60 | 10% | 72% |

## GEOLOGICAL DISCUSSION

The Webb Resources #28-13 Federal was drilled to a total depth of 3091' and plugged and abandoned on July 10, 1972.

Show evaluation by samples was complicated due to the fact that up to 17% crude oil was in the mud.

Valid shows were observed in the Permian Kaibab Formation. Stain was observed throughout this interval on fresh breaks in the samples. A drillstem test of the upper part recovered sulfur water. The Triassic Shinarump Sand also carried shows that are believed to be valid. Due to the friable nature of this sand, evaluation was difficult, but several tighter chips had stain throughout. A drillstem test recovered water.

Another primary objective, the White Rim Sand of Permian Age, carried no valid shows. All staining in this interval was obviously contamination.

Due to the good sample shows in the Kaibab, and the probable shows in the Shinarump, further geological investigation of the area seems merited.

Michael S Webster

Michael S. Webster

## SAMPLE DESCRIPTION

Samples adjusted to log depths. Sample quality, fair to good.

| | |
|---|---|
| 250'-280' | Sand, pink to orange, medium to coarse grained, fair sorted, good porosity, no shows. |
| 280'-370' | Sand, orange to red, fine to medium grained, friable, fair sorted, subround, good porosity, no shows. |
| 370'-490' | Sand, as above, part conglomeratic, good porosity, no shows. Part slightly dolomitic. |
| 490'-520' | Sand, orange to pink, medium grained, well sorted, subround, trace gypsum, good porosity, no shows. |
| 520'-790' | Sand, orange to pink, medium to coarse grained, part conglomeratic, fair sorted, subround, good porosity, no shows. |
| 790'-1130' | Sand, as above, becoming finer grained, scattered interstitial white clay, fair porosity, no show. |
| 1130'-1210' | Sand, pink to orange, fine to medium fine grained, scattered coarse grains, fair sorted, subround, part clay plugged, fair to good porosity, no shows. |
| 1210'-1440' | Sand, as above, interbedded with siltstone, red to orange, sandy, slightly dolomitic. |
| 1440'-1630' | Sand, red to lavender, fine grained, fair sorted, subround, slightly dolomitic, fair to poor porosity, no shows, interbedded with siltstone, as above. |
| 1630'-1730' | Sand, orange to pink, fine grained, fair to well sorted, subround, fair to good porosity, no show, interbedded with claystone, red. |
| 1730'-1950' | Interbedded Siltstone, red, orange, sandy, dolomitic, and Dolomite, pink, very finely sucrosic, shaley, and Claystone, lavender to pale green, slightly calcareous. |
| 1950'-2085' | Claystone, orange, red, pink, green, subwaxy in part, occasional dolomite nodule, occasional coarse floating sand grains. |
| 2085'-2175' | As above, interbedded with Sand, light gray to white, medium to coarse grained, very friable, part slightly arkosic, probably good porosity, no shows. |

| | |
|---|---|
| 2175'-2220' | Claystone, purple to pale green, subwaxy, slightly calcareous. |
| 2220'-2445' | Mostly Siltstone, orange to gray green, sandy, calcareous, part glauconitic, interbedded with Claystone, gray green. |
| 2445'-2531' | Sandstone, buff to gray, medium grained, fair sorted, subround to subangular, good porosity, friable, fair yellow fluorescence, light stain, fair to good cut. (This show is in part contamination from crude in mud system. Part, however, is probably a true show. Several lighter chips had stain on fresh breaks.) |
| 2531'-2610' | Interbedded Shale, red to brown, blocky, firm, silty, calcareous in part, and Siltstone, brown to dark red, sandy, with Claystone, brown, blocky. |
| 2610'-2690' | As above, with much Siltstone, red, calcareous, sandy, hard. |
| 2690'-2741' | Mostly Siltstone, brown to pink, sandy, dolomitic, trace pyrite, with stringers of Sand, gray, fine grained, tight, no show. |
| 2741'-2770' | Dolomite, tan, finely sucrosic, slightly sandy, fair to good pinpoint and vuggy porosity, uniform brown stain, good yellow fluorescence, good streaming cut. (Show partially due to contamination, but mostly due to a true show.) |
| 2770'-2815' | Dolomite, as above, good porosity, good show, becomes very sandy in part, interbedded with Sand, light gray to buff, medium grained, subround, well sorted, fair to good porosity, uniform brown stain, good fluorescence and cut. |
| 2815'-2865' | Sand, as above, fair to good porosity, several tight chips with no stain on fresh breaks indicating no true shows. Interbedded with Dolomite (20% Dolomite), as above, no shows. |
| 2865'-2960' | Sand, light gray, fine to medium grained, fair sorted, subround, fair porosity, no shows. (contaminated) |
| 2960'-3091' | Sand, as above, interbedded with Shale, varicolored, part silty and sandy, hard, part slightly anhydritic. No shows. |

CL1-12A (REV. 1964)

# CHEMICAL & GEOLOGICAL LABORATORIES

P. O. Box 2794
Casper, Wyoming

## WATER ANALYSIS REPORT

| | | | |
|---|---|---|---|
| OPERATOR | Webb Resources | DATE | July 25, 1972 LAB NO. 8246-1 |
| WELL NO. | 28-13 Federal | LOCATION | SW SW 28-39S-8E |
| FIELD | Wildcat | FORMATION | Shinarump |
| COUNTY | Kane | INTERVAL | 2447-2501 |
| STATE | Utah | SAMPLE FROM | DST No. 1 (Bottom) |

REMARKS & CONCLUSIONS: Oily water with clear filtrate.

| Cations | mg/l | meq/l | Anions | mg/l | meq/l |
|---|---|---|---|---|---|
| Sodium | 2132 | 92.74 | Sulfate | 1856 | 38.60 |
| Potassium | 91 | 2.33 | Chloride | 980 | 27.64 |
| Lithium | - | - | Carbonate | - | - |
| Calcium | 103 | 5.14 | Bicarbonate | 2342 | 38.41 |
| Magnesium | 54 | 4.44 | Hydroxide | - | - |
| Iron | present | - | Hydrogen sulfide | - | - |
| Total Cations | | 104.65 | Total Anions | | 104.65 |

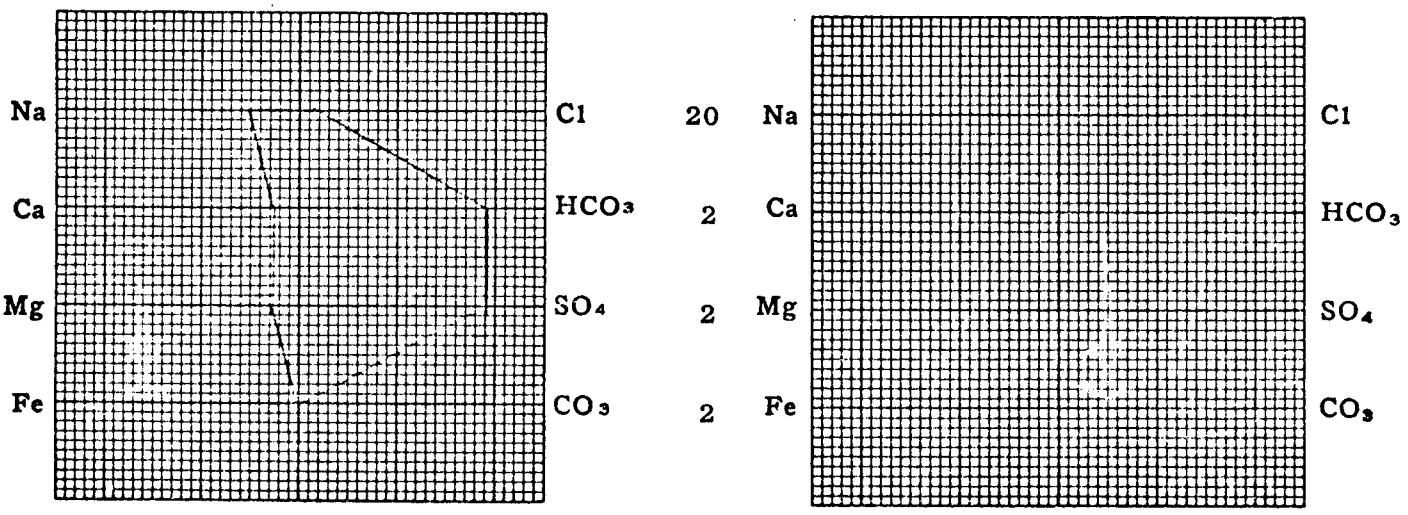
| | |
|---|---|
| Total dissolved solids, mg/l | 6369 |
| NaCl equivalent, mg/l | 4969 |
| Observed pH | 7.6 |

Specific resistance @ 68°F.:
Observed 1.25 ohm-meters
Calculated 1.25 ohm-meters

### WATER ANALYSIS PATTERN

Sample above described

Scale
MEQ per Unit




(Na value in above graphs includes Na, K, and Li)
NOTE: Mg/l = Milligrams per liter Meq/l = Milligram equivalents per liter
Sodium chloride equivalent = by Dunlap & Hawthorne calculation from components

FORM OGC-8-X
FILE IN QUADRUPLICATE

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL & GAS CONSERVATION
1588 West North Temple
Salt Lake City, Utah 84116

# REPORT OF WATER ENCOUNTERED DURING DRILLING

Well Name & Number #28-13 Federal

Operator Webb Resources, Inc. Address Denver, Colorado Phone 892-5504

Contractor Barker Drilling Address Vernal, Utah Phone 789-2101

Location SW 1/4 SW 1/4 Sec. 28 T. 39S N/S R. 8E E/W Kane County, Utah.

Water Sands:

| | Depth: From- | To- | Volume: Flow Rate or Head- | Quality: Fresh or Salty- |
|---|---|---|---|---|
| 1. | Surface | 1700 Navejo | | Fresh |
| 2. | 2450 | 2530 Shinarump | | Fresh |
| 3. | 2738 | 2815 Kaibab | | Fresh |
| 4. | | | | |
| 5. | | | | |

(Continue on reverse side if necessary)

Formation Tops:

| | | | |
|---|---|---|---|
| Chinle | 1730 | Kaibab | 2738 |
| Shinarump | 2445 | White Rim | 2815 |
| Moenkopi | 2531 | | |

Remarks:

NOTE: (a) Upon diminishing supply of forms, please inform this office.
(b) Report on this form as provided for in Rule C-20, General Rules and Regulations and Rules of Practice and Procedure, (See back of this form)
(c) If a water analysis has been made of the above reported zone, please forward a copy along with this form.

CL1-12A (REV. 1964)

# CHEMICAL & GEOLOGICAL LABORATORIES

P. O. Box 2794
Casper, Wyoming

## WATER ANALYSIS REPORT

| | | | |
|---|---|---|---|
| OPERATOR | Webb Resources | DATE | July 25, 1972 LAB NO. 8246-1 |
| WELL NO. | 28-13 Federal | LOCATION | SW SW 28-39S-8E |
| FIELD | Wildcat | FORMATION | Shinarump |
| COUNTY | Kane | INTERVAL | 2447-2501 |
| STATE | Utah | SAMPLE FROM | DST No. 1 (Bottom) |

REMARKS & CONCLUSIONS: Oily water with clear filtrate.

| Cations | mg/l | meq/l | Anions | mg/l | meq/l |
|---|---|---|---|---|---|
| Sodium | 2132 | 92.74 | Sulfate | 1856 | 38.60 |
| Potassium | 91 | 2.33 | Chloride | 980 | 27.64 |
| Lithium | - | - | Carbonate | - | - |
| Calcium | 103 | 5.14 | Bicarbonate | 2342 | 38.41 |
| Magnesium | 54 | 4.44 | Hydroxide | - | - |
| Iron | present | - | Hydrogen sulfide | - | - |
| Total Cations | | 104.65 | Total Anions | | 104.65 |

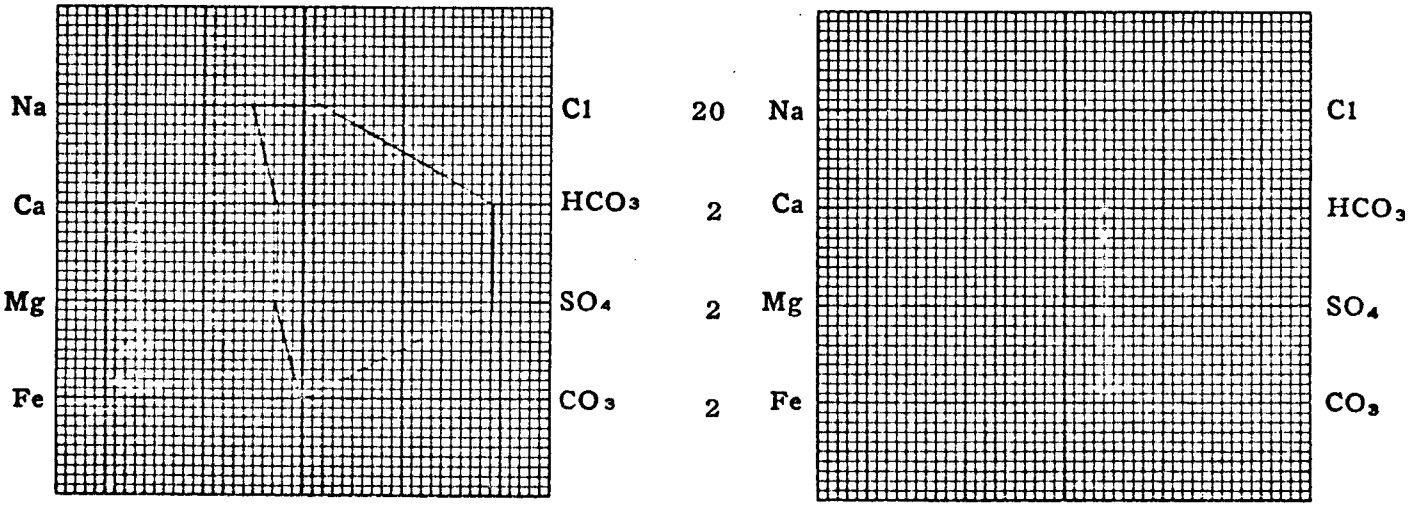
| | |
|---|---|
| Total dissolved solids, mg/l | 6369 |
| NaCl equivalent, mg/l | 4969 |
| Observed pH | 7.6 |

Specific resistance @ 68°F.:
Observed 1.25 ohm-meters
Calculated 1.25 ohm-meters

### WATER ANALYSIS PATTERN

Sample above described

Scale
MEQ per Unit




(Na value in above graphs includes Na, K, and Li)
NOTE: Mg/l = Milligrams per liter Meq/l = Milligram equivalents per liter
Sodium chloride equivalent = by Dunlap & Hawthorne calculation from components